

4/12/05

04-21-2005

Form PTO-1595 (Rev. 09/04)  
OMB No. 0651-0027 (exp. 6/30/2005)U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

REC

102986035  
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

## 1. Name of conveying party(ies)/Execution Date(s):

Michael Ushinsky  
Alexander A. Betin  
Richard L. Gentilman  
Patrick K. Hogan  
Randal W. Tustison

Execution Date(s) 04/05/2005, 04/11/2005

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

## 2. Name and address of receiving party(ies)

Name: RAYTHEON COMPANY

Internal Address: \_\_\_\_\_

Street Address: 870 Winter Street

City: Waltham

State: MA

Country: U.S.A. Zip: 02451-1449

Additional name(s) & address(es) attached? ☐ Yes ☒ No

## 4. Application or patent number(s):

A. Patent Application No.(s)

☒ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address to whom correspondence concerning document should be mailed:

Name: Patent Docket Administration

Internal Address: P.O. Box 902

Bldg. E04, M/S N119

Street Address: 2000 E. El Segundo Boulevard

City: El Segundo

State: CA Zip: 90245-0902

Phone Number: (310) 647-3723

Fax Number: (310) 647-2616

Email Address: john\_e\_gunther@raytheon.com

## 6. Total number of applications and patents involved:

01

## 7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card  
☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

## 8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 50-0616

Authorized User Name John E. Gunther

## 9. Signature:

Signature

March 28, 2005

Date

JOHN E. GUNTHER, Reg. No. 43,649

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

05

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

04/21/2005 ECDOPER 00000178 500616 11103894

01 FC:8021

(40.00 DA)

PATENT  
REEL: 016467 FRAME: 0144

## ASSIGNMENT

WHEREAS, we, as below named inventors of the city and state as stated below next to my name, have invented a(an) **"GLAZE SOLDERED LASER COMPONENTS AND METHOD OF MANUFACTURING"** for which application for Letters Patent of the United States has been executed by us on this day; or (if the following is completed) filed on , as ; and

WHEREAS, RAYTHEON COMPANY, a Delaware Corporation, having its principal place of business in Waltham, Massachusetts, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to RAYTHEON COMPANY, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations, continuations-in- part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said RAYTHEON COMPANY, its successors, assigns or other legal representatives; convenient that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to RAYTHEON COMPANY, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by RAYTHEON COMPANY, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of RAYTHEON COMPANY, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in RAYTHEON COMPANY, its successors, assigns or other legal representatives.

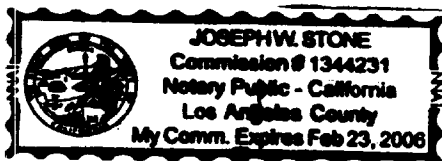
IN WITNESS WHEREOF, we have executed this instrument.

Full Name of Inventor	Inventor Signature	Date Signed
Michael Ushinsky	<i>M. Ushinsky</i>	4/11/05
Residence (City and State)		Invention Agreement Date
Irvine, CA		August 4, 2003

STATE OF CALIFORNIA )  
COUNTY OF LOS ANGELES ) SS:  
On 4/11/05 before me, JOSEPH W. STONE, a Notary Public in and for said State,  
personally appeared MICHAEL USHINSKY

☒ personally known to me or ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



Notary Public

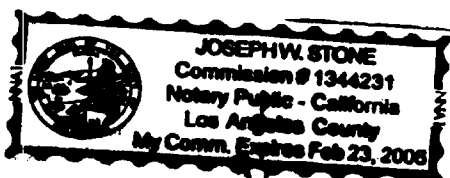
*Joseph W. Stone*

Full Name of Inventor	Inventor Signature	Date Signed
Alexander A. Betin	<i>Alex</i>	4/11/05
Residence (City and State)		Invention Agreement Date
Manhattan Beach, CA		June 28, 1999

STATE OF CALIFORNIA )  
COUNTY OF LOS ANGELES ) SS:  
On 4/11/05 before me, JOSEPH W. STONE, a Notary Public in and for said State,  
personally appeared ALEXANDER A. BETIN

☒ personally known to me or ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.




Notary Public

*Joseph W. Stone*

PATENT

REEL: 016467 FRAME: 0146

IN WITNESS WHEREOF, we have executed this instrument.

Full Name of Inventor Richard Gentilman	Inventor Signature 	Date Signed 4/5/05
Residence (City and State) Acton, MA		Invention Agreement Date January 15, 1974

STATE OF MASSACHUSETTS )

COUNTY OF MIDDLESEX )

SS:

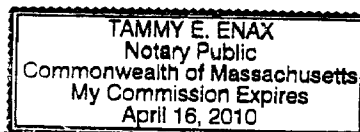
On APRIL 5, 2005 before me, TAMMY E. ENAX, a Notary Public in and for said State,  
personally appeared RICHARD GENTILMAN

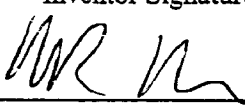
\_\_\_ personally known to me or ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public





Full Name of Inventor Patrick K. Hogan	Inventor Signature 	Date Signed 4/5/05
Residence (City and State) Arlington, MA		Invention Agreement Date October 7, 2002

STATE OF MASSACHUSETTS )

COUNTY OF MIDDLESEX )

SS:

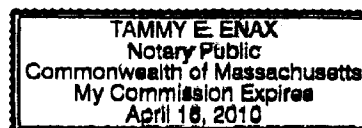
On APRIL 5, 2005 before me, TAMMY E. ENAX, a Notary Public in and for said State,  
personally appeared PATRICK HOGAN

\_\_\_ personally known to me or \_\_\_ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public





IN WITNESS WHEREOF, we have executed this instrument.

Full Name of Inventor Randal W. Tustison	Inventor Signature <i>RWTustison</i>	Date Signed 4/5/05
Residence (City and State) Andover, MA		Invention Agreement Date August 14, 1978

STATE OF MASSACHUSETTS )  
COUNTY OF MIDDLESEX ) SS:

On April 5, 2005 before me, TAMMY E. ENAX, a Notary Public in and for said State,  
personally appeared RANDAL TUSTISON, PATRICK HUGHAN, RICHARD GENTILMAN

\_\_\_ personally known to me or ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Notary Public

